Claims

18. (New) A carrier-drug conjugate comprising:

a carrier which comprises a polypeptide sequence having at least one reducible cystein group;

a drug moiety consisting essentially of a compound selected from the group consisting of pharmaceuticals and diagnostic compounds;

a spacer molecule; and

a thiol binding group;

wherein at least one of the spacer molecule(s), the linkage between spacer molecule and drug moiety and the linkage between spacer molecule and thiol binding group is cleavable hydrolytically or enzymatically, and

wherein at least 0.7 mol of drug is bound per mole of reducible cystein group through said thiol binding group.

19. (New) A carrier-drug conjugate according to claim 18 wherein the carrier is albumin.

20. (New) A carrier-drug conjugate according to claim 18 wherein at least one of said spacer molecule(s) and said linkage contains a peptide bond.

21. (New) A carrier-drug conjugate according to claim 20 which is cleavable by a protease.

22. (New) A carrier-drug conjugate according to claim 18 wherein at least one of said spacer molecule(s)and said linkage is hydrolysable in an acidic medium.

23. (New) A carrier-drug conjugate according to claim 18 wherein said pharmaceutical is selected from the group consisting of cytostatics, cytokines, immunosuppressants, antirheumatics, antipyretics, antiinflammatories, antibiotics, analgesics,

virostatics and anti-fungals.

24. (New) A carrier-drug conjugate according to Claim 23, wherein the cytostatic pharmaceutical is selected from the group consisting of the anthracyclines, the N-nitrosoureas, alkylating agents, purine or pyrimidine antagonists, folic acid antagonists, taxanes, camptothecins, podophyllotoxin derivatives, *Vinca* alkaloids, calicheamicins, maytansinoids or *cis*-configured platinum(II) complexes.

25. (New) A carrier-drug conjugate according to Claim 18 wherein the diagnostically active substance contains at least one substance selected from the group consisting of radionuclides, one or a plurality of ligands containing radionuclides, positron emitters, NMR contrast media, and fluorescing compound(s) and contrast media functional in the near IR region.

26. (New) A carrier-drug conjugate according to one of Claim 18, in which the thiol-binding group contains a maleinimide group, a haloacetamide group, a haloacetate group, a pyridyldithio group, a vinylcarbonyl group, an aziridine group, a disulfide group or an acetylene group, which may be substituted or unsubstituted.

27. (New) A carrier-drug conjugate according to Claim 18 wherein said spacer molecule is selected from the group consisting of substituted or unsubstituted, branched-chain or straight-chain aliphatic alkyl groups having 1 to 12 carbon atoms, substituted or unsubstituted aryl groups and aliphatic carbon rings having 3 to 12 carbon atoms.

28. (New) A method for the preparation of a carrier-drug conjugate comprising

(i) treating a carrier with a reducing agent so that at least 0.7 mol of cysteine SH groups is present in the carrier per mol of reducible cysteine

group; and

(ii) coupling a drug to said cysteine SH groups in said carrier via the thiol-binding group.

29. (New) A method according to Claim 28, wherein said reducing agent is selected from a group consisting of dithiothreitol, dithioerythritol or mercaptoethanol.

30. (New) A method according to Claim 28 wherein said conjugate prepared exhibits a purity higher than 95%.

31. (New) A medicament containing the conjugate according to Claim 18 and, optionally, a pharmaceutically compatible excipient.

32. (New) A medicament according to Claim 31 for the treatment of cancer, autoimmune disorders, acute or chronically inflammatory diseases and diseases that are caused by infectious agents selected from the

group consisting of viruses and microorganisms in mammals in need thereof.

33. (New) A diagnostic kit comprising a carrier-drug conjugate according to Claim 18.

34. (New) A diagnostic kit according to Claim 33 for the detection of diseases selected from a group consisting of cancer, autoimmune disorders, acute or chronically inflammatory diseases, diseases that are caused by infectious agents selected from the group consisting of viruses and microorganisms.